REMARKS

This RCE is being filed in response to the Final Office Action dated February 13, 2003. Claims 1-9 are pending in this application. New independent claims 10 and 11 have been added. No new matter has been added by way of this amendment. Reconsideration of this Application is respectfully requested.

Claims 1 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over PCT Application WO 97/18784 to *Christon* et al. in view of U.S. Patent No. 6,403,857 to *Gross* et al., and in further view of U.S. Patent No. 5,516,572 to *Roe*, while claims 1-3, and 8 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Christon* et al. in view of U.S. Patent No. 6,403,857 to *Chmielewski* et al., and claims 4-6, and 9 have been rejected as being unpatentable over the these references, and in further view of U.S. Patent Publication 2002/0065363 A1 to *Wang* et al. For the following reasons, reconsideration and withdrawal of the rejections are respectfully requested.

As conceded in the Office Action of February 13, 2003, the combination of *Christon* et al. and *Gross* et al. fails to teach a spun-laced non-woven fabric in the formation of the top sheet. To cure this deficiency, reliance is made on U.S. Patent No. 5,516,572 to *Roe*. Here, it is asserted that *Roe* teaches hydroentangling an air-laid web to form a top sheet that is suitable for use in an absorbent article and further to create apertures in the fabric (see page 3 of the Final Office Action of February 13, 2003).

According to the Abstract of the *Roe* reference, "A disposable absorbent article contains a liquid pervious top sheet, having a basis weight ranging from 10 to 40 g/yd^2 and comprising a body with at least the upper portion thereof comprising nonwoven fabric prepared

by forming a web comprising a homogeneous admixture of from 1 to 50% by weight of melt blown fibers and from 99 to 50% by weight of 1.2 to 5 denier staple synthetic fibers and hydroentangling the fibers to form a fabric, with or without the formation of apertures."

In col. 7, lines 3 to 30, *Roe* discloses the following:

> "The homogeneous admixture of melt blown fibers and staple synthetic fibers can be formed, for example, by merging air conveyed streams of the fibers, preferably using turbulent flow (e.g., using air streams in cross directions or utilizing fins to transform laminar flow to turbulent flow), or by forming melt blown fibers into a stream of staple fibers. The homogeneous admixture is readily formed into a web, e.g., by air laying. For example, an air conveyed stream of melt blown fibers from disintegrating a melt blown fiber web using a picker and an air conveyed stream of carded fibers from disintegrating a carded fiber web using a picker are metered into each other and the merged stream is air laid to form a web. In another example, as depicted in FIG. 1, a melt blowing unit is built into a standard carding unit, to produce a web of an admixture of melt blown fibers and carded staple fibers. With reference to FIG. 1, a staple fiber stream 10 is air conveyed via a duct 12 into a carding unit inlet duct 14, and resin is fed via a hopper 16 and an auger 18 through melt blowing nozzles 20 which form melt blown fibers as represented by arrow 15 at the inlet to duct 14 where the melt blown fibers merge with the staple fiber stream 10 and the formed admixture is fed via duct 14 to carding rolls 22."

With respect to the foregoing, Applicants wish to point out that in the present invention, "hydroentangling" refers generally to the process of subjecting a web of fibers to a stream of high velocity water jets (or jets of another fluid) to cause fibers to entangle, and to interlock the fibers and produce a nonwoven fabric. The hydroentangling process may also function to create apertures in the fabric."

In contrast, as is evident from the foregoing passage to which reference is made in the Office Action, the definition of "hydroentangling" pertains to a process for only fabricating apertured fabric. Furthermore, *Roe* fails to teach a water-decomposable spun-laced

surface layer. A spun-laced fabric is not necessarily "water-decomposable." This patent simply fails to teach or suggest the formation of a top sheet having such as a water-decomposable property. The *Roe* patent requires "a liquid pervious top sheet for a disposable absorbent article, having a basis weight ranging from 10 to 40 grams/square yard (i.e., g/yd^2) (12 to 48 g/m^2), preferably from 15 to 30 g/yd^2 (18 to 36 g/m^2), consisting of an apertured body with at least the upper portion thereof comprising nonwoven fabric prepared by forming a web comprising a homogeneous admixture of from 1 to 50% by weight of melt blown fibers, preferably non-elastic polyester fibers, and from 99 to 50% by weight of 1.2 to 5 denier staple synthetic fibers, preferably carded fibers, preferably bicomponent fibers, and hydroentangling the fibers to form a fabric and to form effective apertures therein, preferably effective apertures having an open area occupying 8 to 40%, very preferably 12 to 25%, of the exposed surface area of the fabric."

Since *Christon* et al. requires the top sheet to be readily dispersed when subjected to the mild agitation conditions that are encountered when a conventional toilet is flushed, those skilled in the art would not think to employ the non water dispersible top sheet as taught in *Roe*. Furthermore, even when those skilled art are successful in modifying the absorbent article disclosed in *Christon* et al. with the top sheet as taught by *Roe* et al., it would not be possible to arrive at the invention as defined in claims independent claim 1, because the top sheet of *Christon* et al. is not water-decomposable and thus, it cannot be flushed in a toilet.

Chmielewski et al. also fails to teach or suggest a water-decomposable or water-dispersible top sheet. *Christon* et al. requires the top sheet to be readily dispersed when subjected to the mild agitation conditions that are encountered when a conventional toilet is flushed. A person skilled in the art would not seek to use the non water dispersible top sheet of *Chmielewski* et al. As a result, the rejection of independent claim 8 based on the combination of

these references should not stand. Furthermore, even if a person skilled in the art is successful in modifying the absorbent article as taught in *Christon* et al. with the top sheet as taught by *Chmielewski* et al., the invention defined in independent claims 1 and 8 cannot be reached because the top sheet of the resultant combination is not decomposable in water and thus, it cannot be flushed in a toilet. In view of the foregoing, reconsideration and withdrawal of the rejections are respectfully requested.

New independent claims 10 and 11 have been added. Each of these claims includes limitation that are patentable over the combination of the cited references. Accordingly claims 10 and 11 are also patentable.

In view of the patentability of independent claims 1, 8, 10 and 11, for the reasons above, dependent claims 2-7 and 9 are patentable over the prior art.

In view of the foregoing amendments and remarks, this application should be in condition for allowance. However, should the Examiner believe that direct contact with Applicants' attorney would advance the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

Respectfully submitted,

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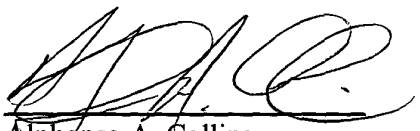

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COMPLETE SET OF PENDING CLAIMS

1. (Amended) A water-decomposable absorbent article comprising a water-decomposable back layer, a water-decomposable and liquid-pervious spun-laced surface layer having a plurality of perforations on an entire area thereof, and a water-decomposable absorbent layer sandwiched between the back layer and the surface layer, wherein;

the absorbent layer is formed of at least one sheet of composite sheet of a water-soluble or water-swellable polymer layer and a water-decomposable fibrous layer, of which an uppermost layer adjacent to the spun-laced surface layer is the water-decomposable fibrous layer.

2. The water-decomposable absorbent article as set forth in claim 1, wherein the absorbent layer is formed of two or more composite sheets stacked to each other, in each of which the water-decomposable fibrous layer is located to face the side of the surface layer.

3. The water-decomposable absorbent article as set forth in claim 1, wherein the absorbent layer is formed of one of the composite sheet which is folded into two so that constituent layers thereof are in an order of water-decomposable fibrous layer, polymer layer, polymer layer and water-decomposable fibrous layer with the uppermost water-decomposable fibrous layer being adjacent to the surface layer.

4. The water-decomposable absorbent article as set forth in claim 1, wherein the water-soluble or water-swellable polymer layer is polyvinyl alcohol layer.

5. The water-decomposable absorbent article as set forth in claim 4, wherein the polyvinyl alcohol layer has a basis weight of at least 10 g/m^2.

6. The water-decomposable absorbent article as set forth in claim 4, wherein the polyvinyl alcohol layer is in the form of a film which is laminated and integrated with the fibrous layer.

7. The water-decomposable absorbent article as set forth in claim 1, wherein an additional absorbent layer that differs from the composite sheet is provided between the composite sheet and the surface layer.

8. (Amended) A water-decomposable absorbent article comprising a water-decomposable back layer, a water-decomposable and liquid-pervious spun-laced surface layer having a plurality of perforations on an entire area thereof, and a water-decomposable absorbent layer sandwiched between the back layer and the surface layer, wherein;

the absorbent layer includes two water-decomposable fibrous layers and a water-soluble or water-swellable polymer layer sandwiched between the two water-decomposable fibrous layers.

9. The water-decomposable absorbent article as set forth in claim 8, wherein the water-soluble or water-swellable polymer layer is a film of polyvinyl alcohol.

10. (New) A water-decomposable absorbent article comprising:

a water-decomposable back layer;

a water-decomposable and liquid-pervious spun-laced surface layer having a plurality of perforations distributed over an entire area thereof; and

a water-decomposable absorbent layer disposed between the back layer and the surface layer;

said absorbent layer being formed of at least one composite sheet of a water-soluble or water-swellable polymer layer and a water-decomposable fibrous layer having properties of dispersing absorbed liquid in a direction perpendicular to a direction of penetration of the liquid for preventing localized concentration of the absorbed liquid, of which an uppermost layer adjacent to the spun-laced surface layer is the water-decomposable fibrous layer.

11. (New) A water-decomposable absorbent article comprising:

a water-decomposable back layer;

a water-decomposable and liquid pervious spun-laced surface layer having a plurality of perforations distributed over an entire area thereof; and

a water-decomposable absorbent layer disposed between the back layer and the surface layer;

said absorbent layer being formed of two water-decomposable fibrous layers and a water-soluble or water-swellable polymer layer sandwiched between said two water-decomposable fibrous layers, and one of said water-decomposable fibrous layer located adjacent said spun-laced surface layer having properties of dispersing absorbed liquid in a direction perpendicular to a direction of penetration of the liquid for preventing localized concentration of the absorbed liquid.